

CLAIMS

1. A power generation system comprising:
 - a power generation portion configured to generate power;
 - a load power detecting means configured to detect a load power which is supplied from a power source including said power generation portion to a load;
 - an operation stop determination means configured to stop a power generation operation of said power generation portion based on the load power detected by said load power detecting means and a stop condition; and
 - a stop condition setting means configured to set the stop condition, wherein said stop condition setting means sets different stop conditions in a plurality of time periods, and wherein said operation stop determination means stops the power generation operation of said power generation portion based on each of the stop conditions set by said stop condition setting means and the load power detected by said load power detecting means.
2. The power generation system according to claim 1, wherein the time periods include two time periods into which one day is divided, the two time periods including at least 2: 00 and at least 14:00, respectively.
3. The power generation system according to claim 1, wherein the time periods include three time periods into which one day is divided, the three time periods including at least 2: 00, at least 10:00, and at least 18:00, respectively.

4. The power generation system according to claim 1, wherein the time periods include four time periods into which one day is divided, the four time periods including at least 2:00, at least 8:00, at least 14:00, and at least 20:00, respectively.
5. The power generation system according to claim 1, wherein the time periods and the stop conditions are pre-set.
6. The power generation system according to claim 1, further comprising:
an input means with which at least the time periods and the stop conditions are input, wherein said stop condition setting means sets the time periods and the stop conditions which have been input with said input means.
7. The power generation system according to claim 1, further comprising:
a learning means configured to learn at least the time periods and the stop conditions based on stored data of the load power which is detected by said load power detecting means, and said stop condition setting means sets the time periods and the stop conditions which have been obtained by said learning means.
8. The power generation system according to claim 1, wherein the stop condition includes at least one of a power condition, a time condition, and a frequency condition, and the at least one condition is set to have different values in the plurality of time periods.
9. The power generation system according to claim 8, wherein the power condition includes an instantaneous power threshold or an integrated power threshold.

10. The power generation system according to claim 9, wherein the instantaneous power threshold or the integrated power threshold is set according to an average value of the load power in each of the time periods.
11. The power generation system according to claim 8, wherein the time condition is a time in which the load power meets the power condition.
12. The power generation system according to claim 11, wherein the time is set according to an average value of the load power in each of the time periods.
13. The power generation system according to claim 8, wherein the frequency condition is a frequency at which the power load meets the power condition.
14. The power generation system according to claim 13, wherein the frequency is set according to an average value of the load power in each of the time periods.
15. The power generation system according to claim 1, wherein said power generation portion is a fuel cell configured to generate power using a fuel gas containing plenty of hydrogen and an oxidizing gas containing oxygen, said power generation system further comprising:
 - a fuel processor configured to generate the fuel gas through a steam reforming reaction of a hydrocarbon material and water; and
 - an air blower configured to supply air which is the oxidizing gas to the fuel cell.

16. A method of operating a power generation system including a power generation portion configured to generate power; and a load power detecting means configured to detect a load power which is supplied from a power source including said power generation portion to a load; comprising the steps of:

setting different stop conditions in a plurality of time periods; and

stopping a power generation operation of said power generation portion based on the different stop conditions and the load power detected by said load power detecting means.